

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 28 SEP 2004

PCT

REC'D PCT/PTO 02 DEC 2004

Applicant's or agent's file reference A3-0413 PYK	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. <b>PCT/SG2003/000136</b>	International Filing Date (day/month/year) <b>3 June 2003</b>	Priority Date (day/month/year) <b>4 June 2002</b>
International Patent Classification (IPC) or national classification and IPC <b>Int. Cl. 7 C23C 18/00, 18/16, 18/38, 18/42, 18/54; H05K 3/06</b>		
Applicant <b>INSTITUTE OF MATERIALS RESEARCH AND ENGINEERING et al</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheet(s).

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand <b>6 August 2003</b>	Date of completion of the report <b>2 September 2004</b>
Name and mailing address of the IPEA/AU <b>AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929</b>	Authorized Officer  <b>THARU FERNANDO</b> Telephone No. (02) 6283 2486

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

the international application as originally filed.

the description, pages 1, 4-8 as originally filed,  
pages , filed with the demand,  
pages 2, 3 received on 27 August 2004 with the letter of 27 August 2004

the claims, pages 10, 11 as originally filed,  
pages , as amended (together with any statement) under Article 19,  
pages , filed with the demand,  
pages 9 received on 27 August 2004 with the letter of 27 August 2004

the drawings, pages , as originally filed,  
pages , filed with the demand,  
pages , received on with the letter of

the sequence listing part of the description:  
pages 1-3 as originally filed  
pages , filed with the demand  
pages , received on with the letter of

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

the language of publication of the international application (under Rule 48.3(b)).

the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

4.  The amendments have resulted in the cancellation of:

the description, pages

the claims, Nos.

the drawings, sheets/fig.

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1-29	YES
	Claims	NO
Inventive step (IS)	Claims 1-29	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-29	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

The present invention is directed to a method of activating and metallising an aromatic polymer film including the steps of (i) pre-treating a first surface of the film with a basic solution; (ii) following the pre-treatment step, applying to said first surface of the film an aqueous seeding solution comprising polymer-stabilised catalyst particles; and (iii) then immersing the film in an electroless plating bath comprising ions of a desired metal so as to deposit a layer of said metal onto the first surface of said film.

The closest prior art document to the present invention are

US 4517254

US 4770899

JP 07216553

However, none of these citations disclose the step where an aqueous seeding solution comprising polymer-stabilised catalyst particles is applied to the first surface of the film following the pre-treatment step. As such, the present invention is novel and inventive over the prior art, and has an industrial applicability.

**Box No. VIII (iii) DECLARATION: ENTITLEMENT TO CLAIM PRIORITY**

*The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

in relation to this international application,

**BHANGALE Sunil Madhukar and Peter Malcolm MORAN** are entitled to claim priority of earlier application No 200203314-0 by virtue of the following:

the applicants are the inventors of the subject matter for which protection was sought by way of the earlier application.

This declaration is made for the purposes of the following designations for national and/or regional patents: US.



This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".